C/CAG
City/County Association of Governments of San Mateo County

VTA
Santa Clara Valley Transportation Authority

TA
San Mateo County Transportation Authority

2020 Peninsula Gateway Corridor Study
Technical Advisory Committee

DATE: Wednesday, May 2, 2007

TIME: 2:00 P.M

PLACE: Menlo Park City Hall
1st Floor Council Conference Room
701 Laurel Street, Menlo Park, CA

****

1. **Introductions**

2. **Draft Study Report Outline & Alternatives Matrix***
   (Review and provide comments)

3. **Operational Analysis**
   (Provide update of Task No. 6 – ALPS2000 Operational Analysis)

4. **Process for Public Outreach****
   (Discuss how to present results from the Study)

5. **Schedule next meeting for June 6, 2007**

6. **Adjourn.**

* Attachment
** Handout at Meeting

Kimley-Horn
and Associates, Inc.

555 12th Street, Suite 1230
Oakland, California
94607

To: John Hoang, C/CAG

From: Paul Krupka

Date: April 25, 2007

Re: 2020 Peninsula Gateway Corridor Study:
Draft Study Report Outline and Draft Alternatives Matrix

This memorandum presents for your review and comment the Draft Study Report Outline and Draft Alternatives Matrix for the 2020 Peninsula Gateway Corridor Study. The draft study report outline summarizes the major divisions of the body of the final report, the anticipated technical appendices, and lists our anticipated figures and tables.

The matrix summarizes measures of effectiveness for the eight (8) alternatives that have been studied in detail, including projected traffic benefits, estimated costs, and potential environmental impacts. Please note that two of the columns under "Traffic Benefits" have not been populated with data as Kimley-Horn is continuing to conduct traffic analyses to derive these values.

We look forward to receiving your comments and to working together to refine the study report outline and matrix.

Enclosures (as stated)

TEL 510 625 0712
FAX 510 625 0714

Draft Study Report Outline
2020 Peninsula Gateway Corridor Study
April 25, 2007

I. EXECUTIVE SUMMARY

- **A. Purpose and Scope of Study**
- **B. Statement of Problem**
- **C. Alternatives Considered**
- **D. Findings and Conclusions**

II. INTRODUCTION

- **A. Purpose and Scope of Study**
- **B. Statement of Problem**

III. EXISTING TRAFFIC CONDITIONS

- **A. Summary of Existing Traffic Conditions**
  - **i. Traffic Volumes and Level of Service**
  - **ii. Travel Times and Speeds**
  - **iii. Accidents**
  - **iv. Observed Conditions**
- **B. Potential Areas of Emphasis for Study Solutions**

IV. FUTURE NO IMPROVEMENT ("DO NOTHING") TRAFFIC FORECASTS

- **A. Forecast Methodology**
- **B. Year 2025 Peak Period Congestion**
- **C. Change in Congestion (Year 2000 to Year 2025)**

V. CONCEPTUAL DEFINITION & ENGINEERING OF ALTERNATIVES

- **A. Alternatives Development Process**
- **B. Description of Improvement Alternatives**
- **C. Conceptual Cost Estimates**
  - **i. Cost Estimate Summary**
  - **ii. Cost Estimate Format**
  - **iii. Description of Cost Items**
    1. Construction Costs
    2. Right-of-Way Costs
    3. Engineering Support Costs

VI. FUTURE WITH IMPROVEMENTS TRAFFIC FORECASTS

- **A. Year 2025 Peak Period Traffic Volumes**
- **B. Year 2025 Peak Period Congestion**

VII. OPERATIONAL ANALYSIS

A. Short-term Future Operational Improvements

i. Willow Avenue
ii. University Avenue

B. Long-term Future Improvements

i. ALPS2000 Model Development and Use

1. Procedures
2. Description of Performance Measures

ii. Simulation Analysis

1. Congestion
2. Vehicle Queuing
3. Travel time

VIII. ENVIRONMENTAL AND SOCIAL IMPACTS

A. Environmental Issues and Constraints
B. Comparison of Impacts by Alternative

IX. ASSESSMENT OF UNIVERSE OF ALTERNATIVES

X. ANALYSIS OF ALTERNATIVES STUDIED IN DETAIL

XI. FINDINGS AND CONCLUSIONS

APPENDICES

A Existing Traffic Data and Inventories
B Universe of Alternatives
C Conceptual Sketches of Alternatives Studied in Detail
D Cost Estimate Worksheets
E Future Traffic Forecasts
F Operational Analysis Details

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COMPARISON OF BENEFITS, COSTS AND IMPACTS
FOR ALTERNATIVES STUDIED IN DETAIL
2020 Peninsula Gateway Corridor Study

ID Code	Alternative	Location	Traffic Benefits				Cost Estimate Summary (2006$)				Potential Environmental Impacts by Alternative				
							Construction Cost	Right-of-Way Cost	Support Cost	Total Project Cost	Visual/ Aesthetics	Noise	Biological Resources	Right-of-Way	Other Issues
			Reduction in Travel Time (Expressed in ranges of peak period travel time savings (min))	Reduction in Delay (Expressed in ranges of peak period delay per vehicle (sec))	Decrease commute traffic on residential streets? (Expressed in ranges of peak period traffic volume)										
1	Route 101 Auxiliary Lanes	MV, PA			Clarke AM: -- PM nb/sb: 9%/0%	Pulgas AM: -- PM nb/sb: 8%/0%	$57 M	$20 M	$28 M	$105 M	Negligible Impacts	Minimal Impact	Possible impact at crossing of Adobe & Matadero Creeks	One building may be impacted at 101/San Antonio interchange	Would likely qualify for an Mitigated Negative Declaration
2	Route 101 Elevated Express Lanes	MV, PA, EPA, MP, RC			--	--	$900 M	$80 M	$230 M	$1,210 M	Significant and unmitigable impact	Less than significant impact given soundwalls would be built on elevated structure	Possible impact at crossing of Adobe & Matadero Creeks	Minimal impact; no acquisition of businessess or residences	Major environmental issues; strong opposition likely; full EIR required
3	Grade Separations on Bayfront Expressway	EPA, MP			Clarke AM nb/sb: 0%/-7% PM nb/sb: 0%/5%	Pulgas AM nb/sb: +71%/-4% PM nb/sb: 0%/+100%	$180 M	$67 M	$86 M	$333 M	Less-than-significant impact	Less-than-significant impact	Impacts to wetlands at edge of Bay	Reconfiguration of access and parking at Sun Microsystems	Would impact recreational trail along Bayfront; BCDC permit needed; full EIR likely required
4	Short-term operational improvements on Willow Road	EPA, MP			na	na	$0.09 M	$0 M	$0.03 M	$0.12 M	None	None	None	None	Would likely qualify for a Categorical Exemption
6	Willow Road Elevated Express Lanes	EPA, MP			Clarke AM nb/sb: 10%/0% PM nb/sb: +4%/0%	Pulgas AM nb/sb: +57%/-4% PM nb/sb: 25%/+200%	$96 M	$33 M	$46 M	$175 M	Significant and unmitigable impact	Significant impact; would require soundwalls on elevated structure	Less-than-significant impact	Minimal impact; no acquisition of businessess or residences	Major environmental issues; strong opposition likely; full EIR required
7	Willow Road Depressed/Cantilevered Express Lanes	EPA, MP			Same as Alt 6	Same as Alt 6	$230 M	$33 M	$110 M	$373 M	Less-than-significant impact	Less-than-significant impact	Less-than-significant impact	Minimal impact; no acquisition of businessess or residences	Would impact Hetch-Hetchy pipelines; presence of Bay mud will affect trench design/cost; trench will need a system for dewatering of storm water & groundwater; full EIR may be required

COMPARISON OF BENEFITS, COSTS AND IMPACTS
FOR ALTERNATIVES STUDIED IN DETAIL
2020 Peninsula Gateway Corridor Study

ID Code	Alternative	Location	Traffic Benefits				Cost Estimate Summary (2006$)				Potential Environmental Impacts by Alternative				
							Construction Cost	Right-of-Way Cost	Support Cost	Total Project Cost	Visual/ Aesthetics	Noise	Biological Resources	Right-of-Way	Other Issues
			Reduction in Travel Time (Expressed in ranges of peak period travel time savings (min))	Reduction in Delay (Expressed in ranges of peak period delay per vehicle (sec))	Decrease commute traffic on residential streets? (Expressed in ranges of peak period traffic volume)										
8	**Short-term operational improvements on University Avenue**	**EPA**			na	na	$0.18 M	$0 M	$0.09 M	$0.27 M	None	None	None	None	Would likely qualify for a Categorical Exemption
9	**University Avenue Depressed/Cantilevered Express Lanes**	**EPA**			Clarke AM nb/sb: 0%/-3% PM: 0%	Pulgas AM nb/sb: 24%/-11% PM nb/sb: 67%/+50%	$440 M	$64 M	$200 M	$704 M	Less-than-significant impact	Less-than-significant impact	Some impact to wetlands at edge of Bay	Minimal impact; no acquisition of businessess or residences	Would impact Hetch-Hetchy pipelines; presence of Bay mud will affect trench design/cost; trench will need a system for dewatering of storm water & groundwater; full EIR may be required

Location Key:	
EPA	East Palo Alto
MP	Menlo Park
MV	Mountain View
PA	Palo Alto
RC	Redwood City

-- = No Data Available
na = not applicable